

WE CLAIM:

1 1. A wireless communications system for communicating with a computer
2 infrastructure of an organization comprising:
3 a portable unit including a user interface;
4 a computer infrastructure interface;
5 a voice recognition unit associated with said computer infrastructure interface, said
6 voice recognition unit permitting a user of the portable unit to communicate with the
7 computer infrastructure by voice communication; and
8 a wireless communications link for connecting said user interface and said computer
9 infrastructure interface, said wireless communications link covering an area designated by the
10 organization for permitting a user of the portable unit to access said computer infrastructure
11 when the portable unit is within the designated area.

1 2. The wireless communications system according to Claim 1, wherein said user
2 interface comprises a two-way voice interface and wherein a voice recognition unit and a
3 voice generation unit are associated with said computer infrastructure interface to permit two-
4 way voice communication between said user and said computer infrastructure.

1 3. The wireless communications system according to Claim 1, wherein said
2 wireless communications link comprises a cellular communications system.

1 4. The wireless communications system according to Claim 3, wherein said
2 cellular communications system comprises a first transmit/receive unit in said portable unit, a
3 second transmit/receive unit associated with said computer infrastructure and a cellular base
4 station for handling transmission of signals between said first and second transmit/receive
5 units.

1 5. The wireless communications system according to Claim 3, wherein said
2 cellular communications system operates at a bandwidth of less than 100kbts/sec.

1 6. The wireless communications system according to Claim 1, wherein said
2 organization comprises a university, and wherein said designated area comprises a campus of
3 the university.

1 7. The wireless communications system according to Claim 1, wherein said
2 organization comprises a company, and wherein said designated area comprises facilities of
3 said company.

1 8. The wireless communications system according to Claim 1, wherein said
2 system further includes an authentication capability for authenticating a user of said portable
3 unit for access to secured facilities of said organization.

1 9. The wireless communications system according to Claim 8, wherein said
2 authentication capability includes an authentication device in said portable unit.

1 10. The wireless communications system according to Claim 8, wherein said
2 authentication capability comprises a software-based voice recognition capability associated
3 with said computer infrastructure.

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A1 1 11. The wireless communications system according to Claim 1 wherein said
2 portable unit is configured to be worn by the user.

1 12. The wireless communications system according to Claim 1, wherein said
2 system includes a plurality of portable units to permit a plurality of users to access the
3 computer infrastructure of the organization.

1 13. The wireless communications system according to Claim 1, wherein said
2 system includes an Internet access capability.

1 14. The wireless communications system according to Claim 1, wherein said
2 system includes at least one remote access node for creating at least one extended designated
3 area of said designated area for permitting a user of the portable unit to access the computer
4 infrastructure when the portable unit is within the at least one extended designated area.

1 15. In combination, a computer infrastructure of an organization and a wireless
2 communications system for enabling at least one individual to communicate with and to
3 utilize features and capabilities of said computer infrastructure, said wireless communications
4 system comprising:

5 a portable unit for each said at least one individual, each portable unit including a
6 two-way voice interface;

7 a computer infrastructure interface;

8 a voice recognition unit and a voice generation unit associated with said computer
9 infrastructure interface; and

10 a wireless communications link for connecting the user interface of each portable unit
11 and the computer infrastructure interface, the wireless communications link covering an area
12 designated by the organization for permitting each at least one individual to access the
13 computer infrastructure by voice communication when the individual's respective portable
14 unit is within the designated area.

1 16. The combination according to Claim 15, wherein said wireless
2 communications link comprises a cellular communications system.

1 17. The combination according to Claim 16, wherein said cellular
2 communications system includes a first transmit/receive unit in each said portable unit, a
3 second transmit/receive unit associated with said computer infrastructure, and a cellular base
4 station for handling the transmission of signals between each said first transmit/receive units
5 and said second transmit/receive unit.

1 18. The combination according to Claim 15, wherein said each said portable unit
2 is configured to be worn by the user.

1 19. The combination according to Claim 15, wherein said wireless
2 communications system further includes an authentication capability for authenticating
3 access to secured facilities in said designated area.

1 20. The combination according to Claim 15, wherein said features and capabilities
2 include at least one of voice communication, directory look-up, calendaring, facility
3 reservation and E-mail send and receive.